DEC STD 107-1 Digital Standard for Terminal Keyboards - Registry of Graphic Character Sets

DOCUMENT IDENTIFIER: A-DS-EL00107-01-0000 Rev B1, 10-Sep-1990

ABSTRACT: This section defines the graphic character sets to be used in Digital hardware and software products for information interchange. The definitions include the code generated by each graphic character. This section contains graphic character sets used as of August, 1981.

APPLICABILITY: The purpose of this registry is to promote compatibility in information interchange and avoid duplication of effort in developing application oriented character sets.

STATUS: APPROVED 10-Sep-1990; use VTX SMC for current status.

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REVISION HISTORY:	Rev A,	03-Jan-1980	
	Rev B,	06-Aug-1981	ECO Number MLO01
	Rev B1,	10-Sep-1990	ECO Number CTS02
Document Management Category:	Terminal Interface Architecture (STI)		
Responsible Department:	Video, Image, and Printer Systems Desktop Architecture		
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APPROVAL: This document has been reviewed and recommended for approval by the Engineering Committee. Rev B1 incorporates clerical changes only.

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CONTENTS

1 INTRODUCTION 1
1.1 PURPOSE 1
1.2 SCOPE 1
1.3 RESPONSIBILITIES 1
2 LIST OF THE REGISTERED CHARACTER SETS AND ESCAPE SEQUENCES 1
3 GRAPHIC CHARACTER SETS AND RELATED CODES 3
4 DIFFERENCES FROM ISO-REGISTERED CHARACTER SETS 39
4.1 GREAT BRITAIN 39
4.2 UNITED STATES 39
4.3 FINLAND 39
4.4 NORWAY AND DENMARK 39
4.5 SWEDEN 39
4.6 GERMANY 39
4.7 FRANCE 39
4.8 CANADA (FRENCH) 39
4.8.1 Differences from ISO-Registered Character Set for Canada 39
4.8.2 Differences from ISO-Registered Character Set for France 40
4.9 JAPAN (ROMAN) 40
4.10 JAPAN (KATAKANA) 40
4.11 APL 40

TABLES

1 Great Britain 4
2 United States 7
3 Finland 10
4 Norway and Denmark 13
5 Sweden 16
6 Germany 19
7 France 22
8 Canada (French) 25
9 Japan (Roman) 28
10 Japan (Katakana) 31
11 APL 36

1 INTRODUCTION

This document is the registry of graphic character sets to be used in Digital hardware and software products for information interchange.

1.1 PURPOSE

The purpose of this registry is to promote compatibility in information interchange and avoid duplication of effort in developing application-oriented character sets.

The standard code for interchange of information among Digital products is the 7-bit coded character set defined in *DEC STD 051-0 Standard Coded Character Set*. Provision for additional characters is made by code extension techniques in which the additional characters or character sets are identified by escape sequences. The procedures for code extension and the structure and use of escape sequences are fully documented in *Standard Registry of Control Functions for Character Imaging Devices*.

1.2 SCOPE

The first graphic character sets to be included in this registry were originated as part of the development projects for the VT100, LA120, and LA34/LA38 terminals. These were determined after consulting various national standards and after talking with people in the various countries to see what they wanted and needed.

In order to invoke different character sets dynamically under remote control, it was decided to use the escape sequences specified in the ISO *International Register of Character Sets To Be Used With Escape Sequences*.

The escape sequences specified in this document are used to assign registered character sets to the G0 and G1 graphic sets. The G0 graphic set is that set of graphic characters which is invoked by the Shift In (SI) control character, code 017 octal. The G1 graphic set is that set of graphic characters which is invoked by the Shift Out (SO) control character, code 016 octal. For a more complete discussion of SI/SO operation, refer to ANSI Standard X3.41-1974.

The escape sequences designate unique character sets. A character set is unique if it differs from any other set in one or more character positions. Character sets not listed in this document must be assigned an appropriate ISO-registered or DEC-private escape sequence, and must be added to this document.

1.3 RESPONSIBILITIES

Refer to *DEC STD 107-0 Digital Standard for Terminal Keyboards - Standard Keyboard Layouts*, subhead 1.3.1 through 1.3.3.

2 LIST OF THE REGISTERED CHARACTER SETS AND ESCAPE SEQUENCES

Character sets may be designated by means of escape sequences. The escape sequences allow the character sets to be designated as either G0 or G1 character sets. G0 character sets are invoked by the control character SI (017 octal) in 7 bits or by the most significant bit (bit 7 = 0) in 8 bits. G1 character sets are invoked by the control character SO (016 octal) in 7 bits or by the most significant bit (bit 7 = 1) in 8 bits.

If only one character set is implemented as G0 or G1, then the escape sequence may be omitted. Examples of this are APL and Katakana, which are implemented as G1 sets, exclusively in some terminals.

Escape sequences listed in the following chart are specified in terms of DEC STD 051 graphics, as well as octal representations.

	Escape Sequences		
Name	G0	G1	Notes
Great Britain	ESC (A 033 050 101	ESC) A 033 051 101	
United States	ESC (B 033 050 102	ESC) B 033 051 102	
Finland	ESC (5 033 050 65	ESC) 5 033 051 66	1, 2
Norway and Denmark	ESC (6 033 050 67	ESC) 6 033 051 66	1, 3
Sweden	ESC (7 033 050 67	ESC) 7 033 051 67	1, 4
Germany	ESC (K 033 050 113	ESC) K 033 051 122	
France	ESC (R 033 050 113	ESC) R 033 051 122	
Canada (French)	ESC (9 033 050 71	ESC) 9 033 051 71	1, 5, 6
Japan (Roman)	ESC (J 033 050 112	ESC) J 033 051 112	
Japan (Katakana)	ESC (I 033 050 102	ESC) I 033 051 102	
APL	ESC (8 033 050 070	ESC) 8 033 051 070	7

Notes

1. These character sets are different from the registered ISO character sets. Details of the differences are listed under subhead 4. Private escape sequences have been assigned to these character sets. If a designated escape sequence is not implemented by a terminal, it is acceptable for the terminal to designate a "closest fit" character set as a fall-back.

CAUTION

Character sets implemented as "closest fit" are subject to change. In all cases, the private escape sequence listed in the table is recommended.

2. This character set should be designated as a "closest fit" if the final character "C" (103) is used.
3. This character set should be designated as a "closest fit" if the final character "E" (105) is used.
4. This character set should be designated as a "closest fit" if the final character "H" (110) is used.
5. This character set should be designated as a "closest fit" if the final character "Q" (121) is used.
6. On the Bell Canada version of the LA120, this character set is selected by ESC (R. This means of selection is not endorsed by this standard.

7. This is the APL typewriter-paired character set

3 GRAPHIC CHARACTER SETS AND RELATED CODES

Refer to Tables 1 through 11. In the tables, codes are specified as 3-digit octal numbers.

Table 1: Great Britain

Code	Graphic	Names or Meanings
041	!	Exclamation Point
042	"	Quotation Marks, Diaeresis
043	£	Pound Sign
044	$	Dollar Sign
045	%	Percent Sign
046	&	Ampersand
047	’	Closing Single Quotation Mark, Apostrophe, Acute Accent
050	(	Opening (Left) Parenthesis
051	)	Closing (Right) Parenthesis
052	*	Asterisk
053	+	Plus Sign
054	,	Comma, Cedilla
055	-	Hyphen, Minus Sign
056	.	Period, Full Stop, Decimal Point
057	/	Solidus, Slant, Slash
060	0	Digit Zero
061	1	Digit One
062	2	Digit Two
063	3	Digit Three
064	4	Digit Four
065	5	Digit Five
066	6	Digit Six
067	7	Digit Seven
070	8	Digit Eight
071	9	Digit Nine
072	:	Colon
073	;	Semicolon
074	<	Opening (Left) Bracket, Less Than Sign
075	=	Equal Sign
076	>	Closing (Right) Bracket, Greater Than Sign
077	?	Question Mark
100	@	Commercial At Sign
101	A	Capital Letter A
102	B	Capital Letter B
103	C	Capital Letter C
104	D	Capital Letter D
105	E	Capital Letter E
106	F	Capital Letter F
107	G	Capital Letter G
110	H	Capital Letter H
111	I	Capital Letter I

Table 1 (Cont.): Great Britain

Code	Graphic	Names or Meanings
112	J	Capital Letter J
113	K	Capital Letter K
114	L	Capital Letter L
115	M	Capital Letter M
116	N	Capital Letter N
117	O	Capital Letter O
120	P	Capital Letter P
121	Q	Capital Letter Q
122	R	Capital Letter R
123	S	Capital Letter S
124	T	Capital Letter T
125	U	Capital Letter U
126	V	Capital Letter V
127	W	Capital Letter W
130	X	Capital Letter X
131	Y	Capital Letter Y
132	Z	Capital Letter Z
133	[	Opening (Left) Square Bracket
134	\	Reverse Solidus, Reverse Slant, Backslash
135	]	Closing (Right) Square Bracket
136	^	Upward Arrow Head, Circumflex Accent
137	_	Underline
140	’	Opening Single Quotation Mark, Grave Accent
141	a	Small Letter A
142	b	Small Letter B
143	c	Small Letter C
144	d	Small Letter D
145	e	Small Letter E
146	f	Small Letter F
147	g	Small Letter G
150	h	Small Letter H
151	i	Small Letter I
152	j	Small Letter J
153	k	Small Letter K
154	l	Small Letter L
155	m	Small Letter M
156	n	Small Letter N
157	o	Small Letter O
160	p	Small Letter P
161	q	Small Letter Q
162	r	Small Letter R

Table 1 (Cont.): Great Britain

Code	Graphic	Names or Meanings
163	s	Small Letter S
164	t	Small Letter T
165	u	Small Letter U
166	v	Small Letter V
167	w	Small Letter W
170	x	Small Letter X
171	y	Small Letter Y
172	z	Small Letter Z
173	{	Opening (Left) Curly Bracket, Opening Left Brace
174	|	Vertical Line
175	}	Closing (Right) Curly Bracket, Closing (Right) Brace
176	~	Tilde, Overline, General Accent

Table 2: United States

Code	Graphic	Names or Meanings
041	!	Exclamation Point
042	"	Quotation Marks, Diaeresis
043	#	Number Sign
044	$	Dollar Sign
045	%	Percent Sign
046	&	Ampersand
047	’	Closing Single Quotation Mark, Apostrophe, Acute Accent
050	(	Opening (Left) Parenthesis
051	)	Closing (Right) Parenthesis
052	*	Asterisk
053	+	Plus Sign
054	,	Comma, Cedilla
055	-	Hyphen, Minus Sign
056	.	Period, Full Stop, Decimal Point
057	/	Solidus, Slant, Slash
060	0	Digit Zero
061	1	Digit One
062	2	Digit Two
063	3	Digit Three
064	4	Digit Four
065	5	Digit Five
066	6	Digit Six
067	7	Digit Seven
070	8	Digit Eight
071	9	Digit Nine
072	:	Colon
073	;	Semicolon
074	<	Opening (Left) Bracket, Less Than Sign
075	=	Equal Sign
076	>	Closing (Right) Bracket, Greater Than Sign
077	?	Question Mark
100	@	Commercial At Sign
101	A	Capital Letter A
102	B	Capital Letter B
103	C	Capital Letter C
104	D	Capital Letter D
105	E	Capital Letter E
106	F	Capital Letter F
107	G	Capital Letter G
110	H	Capital Letter H
111	I	Capital Letter I

Table 2 (Cont.): United States

Code	Graphic	Names or Meanings
112	J	Capital Letter J
113	K	Capital Letter K
114	L	Capital Letter L
115	M	Capital Letter M
116	N	Capital Letter N
117	O	Capital Letter O
120	P	Capital Letter P
121	Q	Capital Letter Q
122	R	Capital Letter R
123	S	Capital Letter S
124	T	Capital Letter T
125	U	Capital Letter U
126	V	Capital Letter V
127	W	Capital Letter W
130	X	Capital Letter X
131	Y	Capital Letter Y
132	Z	Capital Letter Z
133	[	Opening (Left) Square Bracket
134	\	Reverse Solidus, Reverse Slant, Backslash
135	]	Closing (Right) Square Bracket
136	^	Upward Arrow Head, Circumflex Accent
137	_	Underline
140	’	Opening Single Quotation Mark, Grave Accent
141	a	Small Letter A
142	b	Small Letter B
143	c	Small Letter C
144	d	Small Letter D
145	e	Small Letter E
146	f	Small Letter F
147	g	Small Letter G
150	h	Small Letter H
151	i	Small Letter I
152	j	Small Letter J
153	k	Small Letter K
154	l	Small Letter L
155	m	Small Letter M
156	n	Small Letter N
157	o	Small Letter O
160	p	Small Letter P
161	q	Small Letter Q
162	r	Small Letter R

Table 2 (Cont.): United States

Code	Graphic	Names or Meanings
163	s	Small Letter S
164	t	Small Letter T
165	u	Small Letter U
166	v	Small Letter V
167	w	Small Letter W
170	x	Small Letter X
171	y	Small Letter Y
172	z	Small Letter Z
173	{	Opening (Left) Curly Bracket, Opening Left Brace
174	|	Vertical Line
175	}	Closing (Right) Curly Bracket, Closing (Right) Brace
176	~	Tilde, Overline, General Accent

Table 3: Finland

Code	Graphic	Names or Meanings
041	!	Exclamation Point
042	"	Quotation Marks, Diaeresis
043	#	Number Sign
044	$	Dollar Sign
045	%	Percent Sign
046	&	Ampersand
047	’	Closing Single Quotation Mark, Apostrophe, Acute Accent
050	(	Opening (Left) Parenthesis
051	)	Closing (Right) Parenthesis
052	*	Asterisk
053	+	Plus Sign
054	,	Comma, Cedilla
055	-	Hyphen, Minus Sign
056	.	Period, Full Stop, Decimal Point
057	/	Solidus, Slant, Slash
060	0	Digit Zero
061	1	Digit One
062	2	Digit Two
063	3	Digit Three
064	4	Digit Four
065	5	Digit Five
066	6	Digit Six
067	7	Digit Seven
070	8	Digit Eight
071	9	Digit Nine
072	:	Colon
073	;	Semicolon
074	<	Opening (Left) Bracket, Less Than Sign
075	=	Equal Sign
076	>	Closing (Right) Bracket, Greater Than Sign
077	?	Question Mark
100	@	Commercial At Sign
101	A	Capital Letter A
102	B	Capital Letter B
103	C	Capital Letter C
104	D	Capital Letter D
105	E	Capital Letter E
106	F	Capital Letter F
107	G	Capital Letter G
110	H	Capital Letter H
111	I	Capital Letter I

Table 3 (Cont.): Finland

Code	Graphic	Names or Meanings
112	J	Capital Letter J
113	K	Capital Letter K
114	L	Capital Letter L
115	M	Capital Letter M
116	N	Capital Letter N
117	O	Capital Letter O
120	P	Capital Letter P
121	Q	Capital Letter Q
122	R	Capital Letter R
123	S	Capital Letter S
124	T	Capital Letter T
125	U	Capital Letter U
126	V	Capital Letter V
127	W	Capital Letter W
130	X	Capital Letter X
131	Y	Capital Letter Y
132	Z	Capital Letter Z
133	Ä	Capital Letter A Umlaut
134	Ö	Capital Letter O Umlaut
135	Å	Capital Letter A Ring
136	Ü	Capital Letter U Umlaut
137	_	Underline
140	é	Small Letter E With Acute Accent Mark
141	a	Small Letter A
142	b	Small Letter B
143	c	Small Letter C
144	d	Small Letter D
145	e	Small Letter E
146	f	Small Letter F
147	g	Small Letter G
150	h	Small Letter H
151	i	Small Letter I
152	j	Small Letter J
153	k	Small Letter K
154	l	Small Letter L
155	m	Small Letter M
156	n	Small Letter N
157	o	Small Letter O
160	p	Small Letter P
161	q	Small Letter Q
162	r	Small Letter R

Table 3 (Cont.): Finland

Code	Graphic	Names or Meanings
163	s	Small Letter S
164	t	Small Letter T
165	u	Small Letter U
166	v	Small Letter V
167	w	Small Letter W
170	x	Small Letter X
171	y	Small Letter Y
172	z	Small Letter Z
173	ä	Small Letter A Umlaut
174	ö	Small Letter O Umlaut
175	å	Small Letter A Ring
176	ü	Small Letter U Umlaut

Table 4: Norway and Denmark

Code	Graphic	Names or Meanings
041	!	Exclamation Point
042	"	Quotation Marks, Diaeresis
043	#	Number Sign
044	$	Dollar Sign
045	%	Percent Sign
046	&	Ampersand
047	’	Closing Single Quotation Mark, Apostrophe, Acute Accent
050	(	Opening (Left) Parenthesis
051	)	Closing (Right) Parenthesis
052	*	Asterisk
053	+	Plus Sign
054	,	Comma, Cedilla
055	-	Hyphen, Minus Sign
056	.	Period, Full Stop, Decimal Point
057	/	Solidus, Slant, Slash
060	0	Digit Zero
061	1	Digit One
062	2	Digit Two
063	3	Digit Three
064	4	Digit Four
065	5	Digit Five
066	6	Digit Six
067	7	Digit Seven
070	8	Digit Eight
071	9	Digit Nine
072	:	Colon
073	;	Semicolon
074	<	Opening (Left) Bracket, Less Than Sign
075	=	Equal Sign
076	>	Closing (Right) Bracket, Greater Than Sign
077	?	Question Mark
100	Ä	Capital Letter A Umlaut
101	A	Capital Letter A
102	B	Capital Letter B
103	C	Capital Letter C
104	D	Capital Letter D
105	E	Capital Letter E
106	F	Capital Letter F
107	G	Capital Letter G
110	H	Capital Letter H
111	I	Capital Letter I

Table 4 (Cont.): Norway and Denmark

Code	Graphic	Names or Meanings
112	J	Capital Letter J
113	K	Capital Letter K
114	L	Capital Letter L
115	M	Capital Letter M
116	N	Capital Letter N
117	O	Capital Letter O
120	P	Capital Letter P
121	Q	Capital Letter Q
122	R	Capital Letter R
123	S	Capital Letter S
124	T	Capital Letter T
125	U	Capital Letter U
126	V	Capital Letter V
127	W	Capital Letter W
130	X	Capital Letter X
131	Y	Capital Letter Y
132	Z	Capital Letter Z
133	Æ	Capital Letter AE Ligature
134	Ø	Capital Letter O Crossbar
135	Å	Capital Letter A Ring
136	Ü	Capital Letter U Umlaut
137	_	Underline
140	ä	Small Letter A Umlaut
141	a	Small Letter A
142	b	Small Letter B
143	c	Small Letter C
144	d	Small Letter D
145	e	Small Letter E
146	f	Small Letter F
147	g	Small Letter G
150	h	Small Letter H
151	i	Small Letter I
152	j	Small Letter J
153	k	Small Letter K
154	l	Small Letter L
155	m	Small Letter M
156	n	Small Letter N
157	o	Small Letter O
160	p	Small Letter P
161	q	Small Letter Q
162	r	Small Letter R

Table 4 (Cont.): Norway and Denmark

Code	Graphic	Names or Meanings
163	s	Small Letter S
164	t	Small Letter T
165	u	Small Letter U
166	v	Small Letter V
167	w	Small Letter W
170	x	Small Letter X
171	y	Small Letter Y
172	z	Small Letter Z
173	æ	Small Letter AE Ligature
174	ø	Small Letter O Crossbar
175	å	Small Letter A Ring
176	ü	Small Letter U Umlaut

Table 5: Sweden

Code	Graphic	Names or Meanings
041	!	Exclamation Point
042	"	Quotation Marks, Diaeresis
043	#	Number Sign
044	$	Dollar Sign
045	%	Percent Sign
046	&	Ampersand
047	’	Closing Single Quotation Mark, Apostrophe, Acute Accent
050	(	Opening (Left) Parenthesis
051	)	Closing (Right) Parenthesis
052	*	Asterisk
053	+	Plus Sign
054	,	Comma, Cedilla
055	-	Hyphen, Minus Sign
056	.	Period, Full Stop, Decimal Point
057	/	Solidus, Slant, Slash
060	0	Digit Zero
061	1	Digit One
062	2	Digit Two
063	3	Digit Three
064	4	Digit Four
065	5	Digit Five
066	6	Digit Six
067	7	Digit Seven
070	8	Digit Eight
071	9	Digit Nine
072	:	Colon
073	;	Semicolon
074	<	Opening (Left) Bracket, Less Than Sign
075	=	Equal Sign
076	>	Closing (Right) Bracket, Greater Than Sign
077	?	Question Mark
100	É	Capital Letter E With Acute Accent Mark
101	A	Capital Letter A
102	B	Capital Letter B
103	C	Capital Letter C
104	D	Capital Letter D
105	E	Capital Letter E
106	F	Capital Letter F
107	G	Capital Letter G
110	H	Capital Letter H
111	I	Capital Letter I

Table 5 (Cont.): Sweden

Code	Graphic	Names or Meanings
112	J	Capital Letter J
113	K	Capital Letter K
114	L	Capital Letter L
115	M	Capital Letter M
116	N	Capital Letter N
117	O	Capital Letter O
120	P	Capital Letter P
121	Q	Capital Letter Q
122	R	Capital Letter R
123	S	Capital Letter S
124	T	Capital Letter T
125	U	Capital Letter U
126	V	Capital Letter V
127	W	Capital Letter W
130	X	Capital Letter X
131	Y	Capital Letter Y
132	Z	Capital Letter Z
133	Ä	Capital Letter A Umlaut
134	Ö	Capital Letter O Umlaut
135	Å	Capital Letter A Ring
136	Ü	Capital Letter U Umlaut
137	_	Underline
140	é	Small Letter E with Acute Accent Mark
141	a	Small Letter A
142	b	Small Letter B
143	c	Small Letter C
144	d	Small Letter D
145	e	Small Letter E
146	f	Small Letter F
147	g	Small Letter G
150	h	Small Letter H
151	i	Small Letter I
152	j	Small Letter J
153	k	Small Letter K
154	l	Small Letter L
155	m	Small Letter M
156	n	Small Letter N
157	o	Small Letter O
160	p	Small Letter P
161	q	Small Letter Q
162	r	Small Letter R

Table 5 (Cont.): Sweden

Code	Graphic	Names or Meanings
163	s	Small Letter S
164	t	Small Letter T
165	u	Small Letter U
166	v	Small Letter V
167	w	Small Letter W
170	x	Small Letter X
171	y	Small Letter Y
172	z	Small Letter Z
173	ä	Small Letter a Umlaut
174	ö	Small Letter o Umlaut
175	å	Small Letter a Ring
176	ü	Small Letter u Umlaut

Table 6: Germany

Code	Graphic	Names or Meanings
041	!	Exclamation Point
042	"	Quotation Marks, Diaeresis
043	#	Number Sign
044	$	Dollar Sign
045	%	Percent Sign
046	&	Ampersand
047	’	Closing Single Quotation Mark, Apostrophe, Acute Accent
050	(	Opening (Left) Parenthesis
051	)	Closing (Right) Parenthesis
052	*	Asterisk
053	+	Plus Sign
054	,	Comma, Cedilla
055	-	Hyphen, Minus Sign
056	.	Period, Full Stop, Decimal Point
057	/	Solidus, Slant, Slash
060	0	Digit Zero
061	1	Digit One
062	2	Digit Two
063	3	Digit Three
064	4	Digit Four
065	5	Digit Five
066	6	Digit Six
067	7	Digit Seven
070	8	Digit Eight
071	9	Digit Nine
072	:	Colon
073	;	Semicolon
074	<	Opening (Left) Bracket, Less Than Sign
075	=	Equal Sign
076	>	Closing (Right) Bracket, Greater Than Sign
077	?	Question Mark
100	§	Paragraph Sign
101	A	Capital Letter A
102	B	Capital Letter B
103	C	Capital Letter C
104	D	Capital Letter D
105	E	Capital Letter E
106	F	Capital Letter F
107	G	Capital Letter G
110	H	Capital Letter H
111	I	Capital Letter I

Table 6 (Cont.): Germany

Code	Graphic	Names or Meanings
112	J	Capital Letter J
113	K	Capital Letter K
114	L	Capital Letter L
115	M	Capital Letter M
116	N	Capital Letter N
117	O	Capital Letter O
120	P	Capital Letter P
121	Q	Capital Letter Q
122	R	Capital Letter R
123	S	Capital Letter S
124	T	Capital Letter T
125	U	Capital Letter U
126	V	Capital Letter V
127	W	Capital Letter W
130	X	Capital Letter X
131	Y	Capital Letter Y
132	Z	Capital Letter Z
133	Ä	Capital Letter A Umlaut
134	Ö	Capital Letter O Umlaut
135	Ü	Capital Letter U Umlaut
136	^	Upward Arrow Head, Circumflex Accent
137	_	Underline
140	é	Small Letter E with Acute Accent Mark
141	a	Small Letter A
142	b	Small Letter B
143	c	Small Letter C
144	d	Small Letter D
145	e	Small Letter E
146	f	Small Letter F
147	g	Small Letter G
150	h	Small Letter H
151	i	Small Letter I
152	j	Small Letter J
153	k	Small Letter K
154	l	Small Letter L
155	m	Small Letter M
156	n	Small Letter N
157	o	Small Letter O
160	p	Small Letter P
161	q	Small Letter Q
162	r	Small Letter R

Table 6 (Cont.): Germany

Code	Graphic	Names or Meanings
163	s	Small Letter S
164	t	Small Letter T
165	u	Small Letter U
166	v	Small Letter V
167	w	Small Letter W
170	x	Small Letter X
171	y	Small Letter Y
172	z	Small Letter Z
173	ä	Small Letter A Umlaut
174	ö	Small Letter O Umlaut
175	ü	Small Letter U Umlaut
176	ß	Sharp S

Table 7: France

Code	Graphic	Names or Meanings
041	!	Exclamation Point
042	"	Quotation Marks, Diaeresis
043	£	Pound Sign
044	$	Dollar Sign
045	%	Percent Sign
046	&	Ampersand
047	’	Closing Single Quotation Mark, Apostrophe, Acute Accent
050	(	Opening (Left) Parenthesis
051	)	Closing (Right) Parenthesis
052	*	Asterisk
053	+	Plus Sign
054	,	Comma, Cedilla
055	-	Hyphen, Minus Sign
056	.	Period, Full Stop, Decimal Point
057	/	Solidus, Slant, Slash
060	0	Digit Zero
061	1	Digit One
062	2	Digit Two
063	3	Digit Three
064	4	Digit Four
065	5	Digit Five
066	6	Digit Six
067	7	Digit Seven
070	8	Digit Eight
071	9	Digit Nine
072	:	Colon
073	;	Semicolon
074	<	Opening (Left) Bracket, Less Than Sign
075	=	Equal Sign
076	>	Closing (Right) Bracket, Greater Than Sign
077	?	Question Mark
100	à	Small Letter A With Grave Accent Mark
101	A	Capital Letter A
102	B	Capital Letter B
103	C	Capital Letter C
104	D	Capital Letter D
105	E	Capital Letter E
106	F	Capital Letter F
107	G	Capital Letter G
110	H	Capital Letter H
111	I	Capital Letter I

Table 7 (Cont.): France

Code	Graphic	Names or Meanings
112	J	Capital Letter J
113	K	Capital Letter K
114	L	Capital Letter L
115	M	Capital Letter M
116	N	Capital Letter N
117	O	Capital Letter O
120	P	Capital Letter P
121	Q	Capital Letter Q
122	R	Capital Letter R
123	S	Capital Letter S
124	T	Capital Letter T
125	U	Capital Letter U
126	V	Capital Letter V
127	W	Capital Letter W
130	X	Capital Letter X
131	Y	Capital Letter Y
132	Z	Capital Letter Z
133	°	Degree Sign
134	ç	Small Letter C Cedilla
135	§	Paragraph Sign
136	^	Upward Arrow Head, Circumflex Accent
137	_	Underline
140	é	Small Letter E with Acute Accent Mark
141	a	Small Letter A
142	b	Small Letter B
143	c	Small Letter C
144	d	Small Letter D
145	e	Small Letter E
146	f	Small Letter F
147	g	Small Letter G
150	h	Small Letter H
151	i	Small Letter I
152	j	Small Letter J
153	k	Small Letter K
154	l	Small Letter L
155	m	Small Letter M
156	n	Small Letter N
157	o	Small Letter O
160	p	Small Letter P
161	q	Small Letter Q
162	r	Small Letter R

Table 7 (Cont.): France

Code	Graphic	Names or Meanings
163	s	Small Letter S
164	t	Small Letter T
165	u	Small Letter U
166	v	Small Letter V
167	w	Small Letter W
170	x	Small Letter X
171	y	Small Letter Y
172	z	Small Letter Z
173	é	Small Letter E with Acute Accent Mark
174	ù	Small Letter U with Grave Accent Mark
175	è	Small Letter E with Grave Accent Mark
176	¨	Diaeresis, trema

Table 8: Canada (French)

Code	Graphic	Names or Meanings
041	!	Exclamation Point
042	"	Quotation Marks, Diaeresis
043	£	Pound Sign
044	$	Dollar Sign
045	%	Percent Sign
046	&	Ampersand
047	’	Closing Single Quotation Mark, Apostrophe, Acute Accent
050	(	Opening (Left) Parenthesis
051	)	Closing (Right) Parenthesis
052	*	Asterisk
053	+	Plus Sign
054	,	Comma, Cedilla
055	-	Hyphen, Minus Sign
056	.	Period, Full Stop, Decimal Point
057	/	Solidus, Slant, Slash
060	0	Digit Zero
061	1	Digit One
062	2	Digit Two
063	3	Digit Three
064	4	Digit Four
065	5	Digit Five
066	6	Digit Six
067	7	Digit Seven
070	8	Digit Eight
071	9	Digit Nine
072	:	Colon
073	;	Semicolon
074	<	Opening (Left) Bracket, Less Than Sign
075	=	Equal Sign
076	>	Closing (Right) Bracket, Greater Than Sign
077	?	Question Mark
100	à	Small Letter A With Grave Accent Mark
101	A	Capital Letter A
102	B	Capital Letter B
103	C	Capital Letter C
104	D	Capital Letter D
105	E	Capital Letter E
106	F	Capital Letter F
107	G	Capital Letter G
110	H	Capital Letter H
111	I	Capital Letter I

Table 8 (Cont.): Canada (French)

Code	Graphic	Names or Meanings
112	J	Capital Letter J
113	K	Capital Letter K
114	L	Capital Letter L
115	M	Capital Letter M
116	N	Capital Letter N
117	O	Capital Letter O
120	P	Capital Letter P
121	Q	Capital Letter Q
122	R	Capital Letter R
123	S	Capital Letter S
124	T	Capital Letter T
125	U	Capital Letter U
126	V	Capital Letter V
127	W	Capital Letter W
130	X	Capital Letter X
131	Y	Capital Letter Y
132	Z	Capital Letter Z
133	â	Small Letter A With Circumflex Accent
134	ç	Small Letter C Cedilla
135	ê	Small Letter E With Circumflex Accent
136	î	Small Letter I with Circumflex Accent
137	_	Underline
140	ô	Small Letter O with Circumflex Accent
141	a	Small Letter A
142	b	Small Letter B
143	c	Small Letter C
144	d	Small Letter D
145	e	Small Letter E
146	f	Small Letter F
147	g	Small Letter G
150	h	Small Letter H
151	i	Small Letter I
152	j	Small Letter J
153	k	Small Letter K
154	l	Small Letter L
155	m	Small Letter M
156	n	Small Letter N
157	o	Small Letter O
160	p	Small Letter P
161	q	Small Letter Q
162	r	Small Letter R

Table 8 (Cont.): Canada (French)

Code	Graphic	Names or Meanings
163	s	Small Letter S
164	t	Small Letter T
165	u	Small Letter U
166	v	Small Letter V
167	w	Small Letter W
170	x	Small Letter X
171	y	Small Letter Y
172	z	Small Letter Z
173	é	Small Letter E with Acute Accent Mark
174	ù	Small Letter U with Grave Accent Mark
175	è	Small Letter E with Grave Accent Mark
176	û	Small Letter U with Circumflex Accent

Table 9: Japan (Roman)

Code	Graphic	Names or Meanings
041	!	Exclamation Point
042	"	Quotation Marks, Diaeresis
043	#	Number Sign
044	$	Dollar Sign
045	%	Percent Sign
046	&	Ampersand
047	’	Closing Single Quotation Mark, Apostrophe, Acute Accent
050	(	Opening (Left) Parenthesis
051	)	Closing (Right) Parenthesis
052	*	Asterisk
053	+	Plus Sign
054	,	Comma, Cedilla
055	-	Hyphen, Minus Sign
056	.	Period, Full Stop, Decimal Point
057	/	Solidus, Slant, Slash
060	0	Digit Zero
061	1	Digit One
062	2	Digit Two
063	3	Digit Three
064	4	Digit Four
065	5	Digit Five
066	6	Digit Six
067	7	Digit Seven
070	8	Digit Eight
071	9	Digit Nine
072	:	Colon
073	;	Semicolon
074	<	Opening (Left) Bracket, Less Than Sign
075	=	Equal Sign
076	>	Closing (Right) Bracket, Greater Than Sign
077	?	Question Mark
100	@	Commercial At Sign
101	A	Capital Letter A
102	B	Capital Letter B
103	C	Capital Letter C
104	D	Capital Letter D
105	E	Capital Letter E
106	F	Capital Letter F
107	G	Capital Letter G
110	H	Capital Letter H
111	I	Capital Letter I

Table 9 (Cont.): Japan (Roman)

Code	Graphic	Names or Meanings
112	J	Capital Letter J
113	K	Capital Letter K
114	L	Capital Letter L
115	M	Capital Letter M
116	N	Capital Letter N
117	O	Capital Letter O
120	P	Capital Letter P
121	Q	Capital Letter Q
122	R	Capital Letter R
123	S	Capital Letter S
124	T	Capital Letter T
125	U	Capital Letter U
126	V	Capital Letter V
127	W	Capital Letter W
130	X	Capital Letter X
131	Y	Capital Letter Y
132	Z	Capital Letter Z
133	[	Opening (Left) Square Bracket
134	¥	Yen Sign
135	]	Closing (Right) Square Bracket
136	^	Upward Arrow Head, Circumflex Accent
137	_	Underline
140	’	Opening Single Quotation Mark, Grave Accent
141	a	Small Letter A
142	b	Small Letter B
143	c	Small Letter C
144	d	Small Letter D
145	e	Small Letter E
146	f	Small Letter F
147	g	Small Letter G
150	h	Small Letter H
151	i	Small Letter I
152	j	Small Letter J
153	k	Small Letter K
154	l	Small Letter L
155	m	Small Letter M
156	n	Small Letter N
157	o	Small Letter O
160	p	Small Letter P
161	q	Small Letter Q
162	r	Small Letter R

Table 9 (Cont.): Japan (Roman)

Code	Graphic	Names or Meanings
163	s	Small Letter S
164	t	Small Letter T
165	u	Small Letter U
166	v	Small Letter V
167	w	Small Letter W
170	x	Small Letter X
171	y	Small Letter Y
172	z	Small Letter Z
173	{	Opening (Left) Curly Bracket, Opening Left Brace
174	|	Vertical line
175	}	Closing (Right) Curly Bracket, Closing (Right) Brace
176	~	Tilde, Overline, General Accent

Table 10: Japan (Katakana)

Code	Graphic	Names or Pronunciations
041	[1]	Full Stop
042	[1]	Opening Bracket
043	[1]	Closing Bracket
044	[1]	Comma
045	[1]	Conjunctive Symbol
046	[1]	Wo
047	[1]	Small A
050	[1]	Small I
051	[1]	Small U
052	[1]	Small E
053	[1]	Small O
054	[1]	Small YA
055	[1]	Small YU
056	[1]	Small YO
057	[1]	Small TSU
060	[1]	Prolonged Sound Symbol
061	[1]	A
062	[1]	I
063	[1]	U
064	[1]	E

[1]Graphic not available online; see hard copy.

Table 10 (Cont.): Japan (Katakana)

Code	Graphic	Names or Pronunciations
065	[1]	O
066	[1]	KA
067	[1]	KI
070	[1]	KU
071	[1]	KE
072	[1]	KO
073	[1]	SA
074	[1]	SHI
075	[1]	SU
076	[1]	SE
077	[1]	SO
100	[1]	TA
101	[1]	CHI
102	[1]	TSU
103	[1]	TE
104	[1]	TO
105	[1]	NA
106	[1]	NI
107	[1]	NU
110	[1]	NE
111	[1]	NO

[1]Graphic not available online; see hard copy.

Table 10 (Cont.): Japan (Katakana)

Code	Graphic	Names or Pronunciations
112	[1]	HA
113	[1]	HI
114	[1]	FU
115	[1]	HE
116	[1]	HO
117	[1]	MA
120	[1]	MI
121	[1]	MU
122	[1]	ME
123	[1]	MO
124	[1]	YA
125	[1]	YU
126	[1]	YO
127	[1]	RA
130	[1]	RI
131	[1]	RU
132	[1]	RE
133	[1]	RO
134	[1]	WA
135	[1]	N(M)

[1]Graphic not available online; see hard copy.

Table 10 (Cont.): Japan (Katakana)

Code	Graphic	Names or Pronunciations
136	[1]	Voiced Sound Symbol
137	[1]	Semi-Voiced Sound Symbol
140	[1]	TA
141	[1]	CHI
142	[1]	TSU
143	[1]	TE
144	[1]	TO
145	[1]	NA
146	[1]	NI
147	[1]	NU
150	[1]	NE
151	[1]	NO
152	[1]	HA
153	[1]	HI
154	[1]	FU
155	[1]	HE
156	[1]	HO
157	[1]	MA
160	[1]	MI
161	[1]	MU
162	[1]	ME

[1]Graphic not available online; see hard copy.

Table 10 (Cont.): Japan (Katakana)

Code	Graphic	Names or Pronunciations
163	[1]	MO
164	[1]	YA
165	[1]	YU
166	[1]	YO
167	[1]	RA
170	[1]	RI
171	[1]	RU
172	[1]	RE
173	[1]	RO
174	[1]	WA
175	[1]	N(M)
176	[1]	Voiced Sound Symbol

[1] Graphic not available online; see hard copy.

Table 11: APL

Code	Graphic	Names or Meanings
041	¨	Diaeresis
042	)	Closing (Right) Parenthesis
043	<	Less Than Sign
044	≤	Less Than Or Equal To
045	=	Equal Sign
046	>	Greater Than Sign
047	]	Closing (Right) Square Bracket
050	∨	Logical OR Sign
051	∧	Logical AND Sign
052	≠	Not Equal Sign
053	÷	Division Sign
054	,	Comma
055	+	Plus Sign
056	.	Period, Full Stop, Decimal Point
057	/	Solidus, Slant, Slash
060	0	Digit 0
061	1	Digit 1
062	2	Digit 2
063	3	Digit 3
064	4	Digit 4
065	5	Digit 5
066	6	Digit 6
067	7	Digit 7
070	8	Digit 8
071	9	Digit 9
072	(	Opening (Left) Parenthesis
073	[	Opening (Left) Square Bracket
074	;	Semicolon
075	×	Multiplication Sign
076	:	Colon
077	\	Reverse Solidus, Reverse Slant, Backslash
100	-	Negation Sign
101	α	Greek Letter Alpha
102	⊥	Decode Sign
103	∩	
104	⌊	Floor, Minimum
105	ϵ	Greek Letter Epsilon
106	_	Underscore
107	∇	Del
110	△	Delta
111	⍳	Index

Table 11 (Cont.): APL

Code	Graphic	Names or Meanings
112	∘	Small Circle
113	⍀	Ravel
114	[1]	Quad
115	∣	Residue
116	⊤	Encode Sign
117	◯	Large Circle
120	⋆	Star
121	?	Question Mark
122	⍴	Greek Letter Rho
123	⌈	Ceiling
124	~	Tilde
125	↓	Down Arrow
126	∪	
127	⍵	Greek Letter Omega
130	⊃	
131	↑	Up Arrow
132	⊂	
133	←	Left Arrow
134	⊢	Left Tack
135	→	Right Arrow
136	≥	Greater Than Or Equal Sign
137	-	Minus Sign
140	◇	Diamond
141	A	Capital Letter A
142	B	Capital Letter B
143	C	Capital Letter c
144	D	Capital Letter d
145	E	Capital Letter E
146	F	Capital Letter F
147	G	Capital Letter G
150	H	Capital Letter H
151	I	Capital Letter I
152	J	Capital Letter J
153	K	Capital Letter K
154	L	Capital Letter L
155	M	Capital Letter M
156	N	Capital Letter N
157	O	Capital Letter O
160	P	Capital Letter P
161	Q	Capital Letter Q

[1] Graphic not available online; see hard copy.

Table 11 (Cont.): APL

Code	Graphic	Names or Meanings
162	R	Capital Letter R
163	S	Capital Letter S
164	T	Capital Letter T
165	U	Capital Letter U
166	V	Capital Letter V
167	W	Capital Letter W
170	X	Capital Letter X
171	Y	Capital Letter Y
172	Z	Capital Letter Z
173	{	Opening (Left) Brace
174	⊣	Right Tack
175	}	Closing (Right) Brace
176	$	Dollar Sign

4 DIFFERENCES FROM ISO-REGISTERED CHARACTER SETS

4.1 GREAT BRITAIN

a. Octal Code 176 is ISO overline, DEC tilde.

4.2 UNITED STATES

No differences.

4.3 FINLAND

a. Octal Code 100 is ISO Long Unit Space, DEC Commercial At Sign.
b. Octal Code 136 is ISO Solid, DEC Capital Letter U Umlaut
c. Octal Code 140 is ISO Short Unit Space, DEC Small Letter E with Acute Accent Mark.

4.4 NORWAY AND DENMARK

a. Octal Code 042 is ISO Opening Quotation Mark, DEC Quotation Marks.
b. Octal Code 043 is ISO Closing Quotation Mark, DEC Number Sign.
c. Octal Code 100 is ISO Long Unit Space, DEC Capital Letter A Umlaut.
d. Octal Code 136 is ISO Solid, DEC Capital Letter U Umlaut.
e. Octal Code 140 is ISO Short Unit Space, DEC Small Letter A Umlaut.
f. Octal Code 176 is ISO Short Dash, DEC Small Letter U Umlaut.

4.5 SWEDEN

a. Octal Code 044 is ISO Currency Symbol, DEC Dollar Sign.

4.6 GERMANY

No differences.

4.7 FRANCE

No differences.

4.8 CANADA (FRENCH)

4.8.1 Differences from ISO-Registered Character Set for Canada

There is no corresponding ISO-registered set for Canada.

4.8.2 Differences from ISO-Registered Character Set for France

a. Octal Code 043 is ISO Pound Sign, DEC Number Sign.
b. Octal Code 133 is ISO Degree Sign, DEC Small Letter A with Circumflex Accent.
c. Octal Code 135 is ISO Paragraph Sign, DEC Small Letter E with Circumflex Accent.
d. Octal Code 136 is ISO Circumflex Accent, DEC Small Letter F with Circumflex Accent.
e. Octal Code 140 is ISO Grave Accent, DEC Small Letter O with Circumflex Accent.
f. Octal Code 176 is ISO Diaeresis, DEC Small Letter U with Circumflex Accent.

4.9 JAPAN (ROMAN)

a. Octal Code 176 is ISO overline, DEC tilde.

4.10 JAPAN (KATAKANA)

No differences.

4.11 APL

There is no corresponding ISO-registered set for APL.

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